

# Object Oriented Programming LAB – BSDSF23

(Morning and Afternoon)

## Lab 10 – 29-04-2024

---

1. Create required classes with the minimum possible code. Then create at least 4 object of type student composed of a string rollno, string name, int semester, list of 4 enrolled subjects. Each subject has string code, string name, int credits, and enrolled subject is composed of subject and percent marks.

Using pickle, save the above student records one by one in a file named 'studs.pkl'.

Write another program to retrieve student records in the file saved above and display them on screen. 30

2. Create a CSV file to store information about some persons you idealized. The information consists of the string name, string nationality, string gender, float age, string notes (sentences why idealize). Open the file in text editor and identify (read every attribute) the information in it. 30

3. Create a program that displays the following text menu and accept the input accordingly.

a) Add, s) Search, d) Delete, l) List All, e) Edit, and q) Quit

The valid inputs are a, s, d, l, e, and q. if user enter otherwise, the program informs him, invalid input, choose from below mentioned options and display the menu again. In case the user input a valid option the program performs the appropriate functionality for the courses data and display the menu after that.

The structure of the courses data is code: str of maximum length 8 characters, title: str of maximum length 40 characters, credits hours: int, default semester: int and type: core or elective.

You may use any method to manage data from text files of any format, binary files, pickle objects, json objects, database, and you are responsible for your choice. 40

\*\*\*\*\*